

JC07 Rec'd PCT/PTO 16 JAN 20

SEQUENCE LISTING

GENERAL INFORMATION:

(i) APPLICANT: PLANTECHNO S.R.L.

(ii) TITLE OF INVENTION:

SYNTHETIC POLYNUCLEOTIDE ENCODING HUMAN LACTOFERRIN,
VECTORS, CELLS AND TRANSGENIC PLANTS CONTAINING IT

(iii) NUMBER OF SEQUENCES: 22

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Società Italiana Brevetti

(B) STREET: Piazza di Pietra, 39

(C) CITY: Roma

(D) COUNTRY: Italy

(E) POSTAL CODE: I-00186

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE:

(B) COMPUTER: IBM PC compatible

(C) OPERATING SYSTEM: PC-DOS/MS-DOS Rev. 5.0

(D) SOFTWARE: Microsoft Word 6.0

(viii) ATTORNEY INFORMATION

(A) NAME: LEONE, Mario (Eng.)

(B) REFERENCE: PC-EBR

(ix) TELECOMMUNICATION INFORMATION

(A) TELEPHONE: 06/695441

(B) TELEFAX: 06/69544830

(C) TELEX: 612287 ROPAT

T02280-EBR-4/60

- (1) INFORMATION FOR SEQ ID NO: 1:
(i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 2079 bp
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear
(ii) MOLECULE TYPE: DNA
(ix) FEATURES
 (A) NAME: LFUSYN
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

GGC CGT AGG AGA AGG AGT GTT CAA TGG TGC GCA GTA TCA CAA CCA 45
G R R R R S V Q W C A V S Q P

GAG GCC ACA AAA TGC TTC CAA TGG CAA AGG AAT ATG AGA AAA GTT 90
E A T K C F Q W Q R N M R K V

CGT GGA CCT CCT GTA TCT TGC ATA AAG AGA GAT TCA CCC ATC CAG 135
R G P P V S C I K R D S P I Q

TGT ATC CAG GCA ATT GCG GAA AAC AGA GCT GAT GCT GTG ACT CTT 180
C I Q A I A E N R A D A V T L

GAT GGT GGT TTC ATA TAC GAG GCA GGA CTT GCC CCA TAC AAA CTG 225
D G G F I Y E A G L A P Y K L

CGA CCT GTA GCG GCG GAA GTC TAC GGG ACC GAA AGA CAA CCA CGA 270
R P V A A E V Y G T E R Q P R

ACT CAC TAT TAT GCT GTG GCT GTT GTG AAG AAG GGC GGA TCT TTT 315
T H Y Y A V A V V K K G G S F

CAG CTG AAC GAA CTT CAA GGT CTG AAG TCA TGC CAC ACA GGA CTT 360
Q L N E L Q G L K S C H T G L

CGC AGG ACC GCT GGA TGG AAT GTC CCT ATA GGG ACA CTT CGT CCA 405
R R T A G W N V P I G T L R P

T022001 22021460

TTC TTG AAT TGG ACG GGT CCA CCT GAG CCC ATT GAG GCA GCT GTG 450
F L N W T G P P E P I E A A V

GCA AGA TTC TTC TCA GCC TCT TGT GTT CCA GGT GCA GAT AAA GGA 495
A R F F S A S C V P G A D K G

CAA TTC CCC AAC CTT TGT CGC CTG TGT GCG GGG ACA GGG GAA AAC 540
Q F P N L C R L C A G T G E N

AAA TGT GCA TTC TCA TCC CAG GAA CCG TAC TTC AGC TAC TCT GGT 585
K C A F S S Q E P Y F S Y S G

GCC TTT AAG TGT CTT AGA GAC GGT GCT GGA GAT GTT GCT TTT ATT 630
A F K C L R D G A G D V A F I

AGA GAG AGC ACA GTG TTT GAG GAT CTT TCA GAC GAG GCT GAA AGG 675
R E S T V F E D L S D E A E R

GAC GAG TAT GAG TTA CTC TGC CCA GAC AAC ACT CGT AAG CCA GTT 720
D E Y E L L C P D N T R K P V

GAC AAG TTC AAA GAT TGC CAT CTT GCA CGG GTC CCT TCT CAT GCC 765
D K F K D C H L A R V P S H A

GTT GTG GCA CGA AGT GTT AAT GGA AAG GAG GAT GCC ATC TGG AAT 810
V V A R S V N G K E D A I W N

CTT CTC CGC CAA GCA CAG GAA AAG TTT GGA AAG GAC AAG TCA CCG 855
L L R Q A Q E K F G K D K S P

AAA TTC CAG CTC TTT GGT TCC CCT AGT GGG CAG AAA GAT CTT CTG 900
K F Q L F G S P S G Q K D L L

TTC AAG GAC TCT GCC ATT GGG TTT TCG AGA GTG CCA CCT AGG ATA 945
F K D S A I G F S R V P P R I

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GAT TCT GGG TTG TAC CTT GGC TCC GGA TAC TTT ACT GCA ATT CAG 990
D S G L Y L G S G Y F T A I Q

AAC TTG AGG AAA AGT GAG GAG GAA GTT GCT GCC CGG CGT GCG CGG 1035
N L R K S E E E V A A R R A R

GTC GTT TGG TGT GCG GTG GGA GAG CAA GAG TTG CGC AAG TGT AAC 1080
V V W C A V G E Q E L R K C N

CAG TGG AGT GGT TTG AGC GAA GGA TCT GTG ACC TGC TCA TCG GCC 1125
Q W S G L S E G S V T C S S A

TCC ACT ACA GAA GAT TGC ATC GCC CTG GTG TTG AAA GGA GAA GCT 1170
S T T E D C I A L V L K G E A

GAT GCC ATG AGT TTG GAT GGA GGA TAT GTT TAC ACT GCA GGT AAA 1215
D A M S L D G G Y V Y T A G K

TGT GGT TTG GTG CCT GTC CTT GCA GAG AAC TAC AAA TCA CAA CAA 1260
C G L V P V L A E N Y K S Q Q

AGC AGT GAC CCT GAT CCT AAC TGT GTG GAT AGA CCT GTG GAA GGA 1305
S S D P D P N C V D R P V E G

TAT CTT GCT GTG GCG GTG GTT AGG AGA TCA GAC ACT AGC CTT ACC 1350
Y L A V A V V R R S D T S L T

TGG AAC TCT GTG AAA GGC AAG AAG TCC TGC CAC ACC GCC GTG GAC 1395
W N S V K G K K S C H T A V D

AGG ACT GCA GGT TGG AAT ATC CCC ATG GGA TTG CTC TTC AAC CAG 1440
R T A G W N I P M G L L F N Q

ACG GGC TCC TGC AAA TTT GAT GAA TAT TTC AGT CAA AGC TGT GCC 1485
T G S C K F D E Y F S Q S C A

CCT GGT TCT GAC CCA AGA TCT AAT CTC TGT GCT TTG TGT ATT GGA 1530

T02280-EEB2460

P G S D P R S N L C A L C I G

GAT GAG CAA GGT GAG AAT AAG TGC GTT CCC AAC AGC AAC GAG AGA 1575
D E Q G E N K C V P N S N E R

TAC TAC GGT TAC ACT GGG GCT TTC CGT TGC TTG GCT GAG AAT GCT 1620
Y Y G Y T G A F R C L A E N A

GGA GAC GTT GCA TTT GTG AAA GAT GTC ACT GTC TTG CAG AAC ACT 1665
G D V A F V K D V T V L Q N T

GAT GGA AAT AAC AAT GAG GCA TGG GCT AAG GAT TTG AAG CTT GCA 1710
D G N N N E A W A K D L K L A

GAC TTT GCG TTG CTG TGC CTC GAT GGC AAA CGT AAG CCT GTG ACT 1755
D F A L L C L D G K R K P V T

GAA GCT AGA AGC TGC CAT CTT GCC ATG GCC CCG AAT CAT GCT GTG 1800
E A R S C H L A M A P N H A V

GTG TCT CGT ATG GAT AAG GTG GAA CGC TTG AAA CAG GTG TTG CTC 1845
V S R M D K V E R L K Q V L L

CAC CAA CAG GCT AAA TTT GGT AGA AAT GGA TCT GAC TGC CCG GAC 1890
H Q Q A K F G R N G S D C P D

AAG TTT TGC TTA TTC CAG TCT GAA ACC AAA AAC CTT TTG TTC AAT 1935
K F C L F Q S E T K N L L F N

GAC AAC ACT GAG TGT CTT GCC AGA CTC CAT GGC AAA ACA ACA TAT 1980
D N T E C L A R L H G K T T Y

GAA AAA TAT TTG GGA CCA CAG TAT GTC GCA GGC ATT ACT AAT CTG 2025
E K Y L G P Q Y V A G I T N L

AAA AAG TGC TCA ACC TCC CCA CTC CTA GAA GCC TGT GAA TTC CTA 2070
K K C S T S P L L E A C E F L

T02200-228460

AGG AAG TAA

2079

R K *

(2) INFORMATION FOR SEQ ID NO: 2:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 30 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT46

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

GGATCCATGG GCCGTAGGAG AAGGAGTGTT

30

(3) INFORMATION FOR SEQ ID NO: 3:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 32 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT 47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

GAGCTCCTTC GGTTTTACTT CCTGAGGAAT TC

32

(4) INFORMATION FOR SEQ ID NO: 4:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 42 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

102280-2284760

(A) NAME: PLT 48

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

TCTAGATAAA ATAATCTATA CATTAAAAAA TTTGATTTTA AA 42

(5) INFORMATION FOR SEQ ID NO: 5:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 36 bp

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

(A) NAME: PLT 49

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

GGATCCGACT GAGTCGGATA AGAAGAAAAG AAAAGA 36

(6) INFORMATION FOR SEQ ID NO: 6:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 36 bp

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

(A) NAME: PLT 50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

TCTAGAGTTT TCAAATTGTA ATTTAATGT GTGTTG 36

(7) INFORMATION FOR SEQ ID NO: 7:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 36 bp

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

004382-0300
T02280-22804260

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: oligonucleotide
- (ix) FEATURES
 - (A) NAME: PLT 51
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

GGATCCCACC TTAAGGAGGT TGCAACGAGC GTGGCA 36

- (8) INFORMATION FOR SEQ ID NO:8:
- (i) SEQUENCE CHARACTERISTICS
 - (A) LENGTH: 250 bp
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: oligonucleotide
- (ix) FEATURES
 - (A) NAME: PLT 120
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

GGC CGT AGG AGA AGG AGT GTT CAA TGG TGC GCA GTA TCA CAA CCA GAG

GCC ACA AAA TGC TTC CAA TGG CAA AGG AAT ATG AGA AAA GTT CGT GGA

CCT CCT GTA TCT TGC ATA AAG AGA GAT TCA CCC ATC CAG TGT ATC CAG

GCA ATT GCG GAA AAC AGA GCT GAT GCT GTG ACT CTT GAT GGT GGT TTC

ATA TAC GAG GCA GGA CTT GCC CCA TAC AAA CTG CGA CCT GTA GCG GCG

GAA GTC TAC G

- (9) INFORMATION FOR SEQ ID NO:9:
- (i) SEQUENCE CHARACTERISTICS
 - (A) LENGTH: 250 bp
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

09743823-032304

- (ii) MOLECULE TYPE: oligonucleotide
(ix) FEATURES
 (A) NAME: PLT 121
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

GC ACC TGG AAC ACA AGA GGC TGA GAA GAA TCT TGC CAC AGC TGC CTC
AAT GGG CTC AGG TGG ACC CGT CCA ATT CAA GAA TGG ACG AAG TGT CCC
TAT AGG GAC ATT CCA TCC AGC GGT CCT GCG AAG TCC TGT GTG GCA TGA
CTT CAG ACC TTG AAG TTC GTT CAG CTG AAA AGA TCC GCC CTT CTT CAC
AAC AGC CAC AGC ATA ATA GTG AGT TCG TGG TTG TCT TTC GGT CCC GTA
GAC TTC CGC CG

- (10) INFORMATION FOR SEQ ID NO:10:
(i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 250 bp
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear
(ii) MOLECULE TYPE: oligonucleotide
(ix) FEATURES
 (A) NAME: PLT 122
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

AAC TGG CTT ACG AGT GTT GTC TGG GCA GAG TAA CTC ATA CTC GTC
CCT TTC AGC CTC GTC TGA AAG ATC CTC AAA CAC TGT GCT CTC TCT
AAT AAA AGC AAC ATC TCC AGC ACC GTC TCT AAG ACA CTT AAA GGC
ACC AGA GTA GCT GAA GTA CGG TTC CTG GGA TGA GAA TGC ACA TTT
GTT TTC CCC TGT CCC CGC ACA CAG GCG ACA AAG GTT GGG GAA TTG

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TCC TTT ATC TGC ACC TGG AAC ACA A

(11) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 255 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT 123

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

GTA CAA CCC AGA ATC TAT CCT AGG TGG CAC TCT CGA AAA CCC AAT GGC

AGA GTC CTT GAA CAG AAG ATC TTT CTG CCC ACT AGG GGA ACC AAA GAG

CTG GAA TTT CGG TGA CTT GTC CTT TCC AAA CTT TTC CTG TGC TTG GCG

GAG AAG ATT CCA GAT GGC ATC CTC CTT TCC ATT AAC ACT TCG TGC CAC

AAC GGC ATG AGA AGG GAC CCG TGC AAG ATG GCA ATC TTT GAA CTT GTC

AAC TGG CTT ACG AGT

(12) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 251 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT 124

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

0974323.082201

TA TCC TCC ATC CAA ACT CAT GGC ATC AGC TTC TCC TTT CAA CAC CAG
GGC GAT GCA ATC TTC TGT AGT GGA GGC CGA TGA GCA GGT CAC AGA TCC
TTC GCT CAA ACC ACT CCA CTG GTT ACA CTT GCG CAA CTC TTG CTC TCC
CAC CGC ACA CCA AAC GAC CCG CGC ACG CCG GGC AGC AAC TTC CTC CTC
ACT TTT CCT CAA GTT CTG AAT TGC AGT AAA GTA TCC GGA GCC AAG GTA
CAA CCC AGA ATC

(13) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 75 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

(D) OTHER INFORMATION: leader sequence of protein 7S
basic globulin

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

ATGGCTTCTA TCCTCCACTA CTTTTTAGCC CTCTCTCTTT CTTGCTCTTT 50
TCTTTTCTTC TTATCCGACT CAGTC 75

(14) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 191 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

(D) OTHER INFORMATION: leader sequence of protein β -
conglycinine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

094323-08201

ATGATGAGAG CGCGGTTCCC ATTACTGTTG CTGGGAGTTG TTTTCCTAGC 50
ATCAGTTTCT GTCTCATTTG GCATTGCGTA TTGGGAAAAG CAGAACCCCA 100
GTCACAACAA GTGCCTCCGA AGTTGCAATA GCGAGAAAGA CTCCTACAGG 150
AACCAAGCAT GCCACGCTCG TTGCAACCTC CTTAAGGTG 189

(15) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 250 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT 125

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GAGCAATCCC ATGGGGATAT TCCAACCTGC AGTCCTGTCC ACGGCGGTGT 50
GGCAGGACTT CTTGCCTTTC ACAGAGTTCC AGGTAAGGCT AGTGTCTGAT 100
CTCCTAACCA CCGCCACAGC AAGATATCCT TCCACAGGTC TATCCACACA 150
GTTAGGATCA GGGTCACTGC TTTGTTGTGA TTTGTAGTTC TCTGCAAGAC 200
AGGCACCAAA CCACATTTAC CTGCAGTGTA AACATATCCT CCATCCAAAC 250

(16) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 254 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT 126

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

CCATCAGTGT TCTGCAAGAC AGTGACATCT TTCACAAATG CAACGTCTCC 50
AGCATTCTCA GCCAAGCAAC GGAAAGCCCC AGTGTAACCG TAGTATCTCT 100
CGTTGCTGTT GGAACGCAC TTATTCTCAC CTTGCTCATC TCCAATACAC 150
AAAGCACAGA GATTAGATCT TGGGTCAGAA CCAGGGGCAC AGCTTTGACT 200
GAAATATTCA TCAAATTTGC AGGAGCCCGT CTGGTTGAAG AGCAAGCCCA 250
TGGG 254

0974823-08204
P02280-2284260

(17) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 229 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT 127

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

GCAGTCAGAT CCATTTCTAC CAAATTTAGC CTGTTGGTGG AGCAACACCT 50
GTTTCAAGCG TTCCACCTTA TCCATACGAG ACACCACAGC ATGATTCGGG 100
GCCATGGCAA GATGGCAGCT TCTAGCTTCA GTCACAGGCT TACGTTTGCC 150
ATCGAGGCAC AGCAACGCAA AGTCTGCAAG CTTCAAATCC TTAGCCCATG 200
CCTCATTGTT ATTTCCATCA GTGTTCTGC 229

(18) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 210 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT 128

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

TTACTTCCTT AGGAATTCAC AGGCTTCTAG GAGTGGGGAG GTTGAGCACT 50
TTTTTCAGATT AGTAATGCCT GCGACATACT GTGGTCCCAA ATATTTTTC 100
TATGTTGTTT TGCCATGGAG TCTGGCAAGA CACTCAGTGT TGTCATTGAA 150
CAAAAGGTTT TTGGTTTCAG ACTGGAATAA GCAAAACTTG TCCGGGCAGT 200
CAGATCCATT 210

(19) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 30 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

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(ix) FEATURES

(A) NAME: PLT 129

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

GGATCCATGG GCCGTAGGAG AAGGAGTGT

30

(20) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 28 bp

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

(A) NAME: PLT 120

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

GAGCTCTTAC TTCCTTAGGA ATTCACAG

28

(21) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: bp

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(ix) FEATURES

(D) OTHER INFORMATION: sequence of promoter of gene encoding 7S basic globulin

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

TAAAATAATC TATACATTAA AAAATTTGAT TTTAAAATTT TAGAAATTCA	50
TGATTTTATT TTTTTTTACC AGAAATCCGT TAATATTGTT AAAATATTAC	100
CAACTAATTT ATAAATTTTA TTTTAAGGCA ATTAAGCATG TTTGATAAAA	150
TATATATATT GTTATAAATA CTTTTCAAAA GTATAAAGTT GATGATGGCG	200
TGGTGGTAGA TTATTTTAGT TCTAGGTTCTG AATGCAAGTT GGTTTAGACA	250
TTTAGCCTTA TTCTTTTTTC TAACCAAAAT AAATGTAAAT GGAAAACCTT	300
TAGGAAAAAA AAGAAATCAA AATTGAAAAC ATCATCCGGT GGAGTCGAGA	350
AGCCACACC CACGTGACCC AACAATATTA AAATAAGAGT TTGCTCTACA	400

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GTAAATGCGA TACTTTTTTA TTCAATACTT TTTCCACTTC TAAAATCTTG 450
 GAGATTTGCA CCGTTAACTA ATTAAGTGTT ATATCCAACG GTCCTAAAAA 500
 AACTTGTGTA CCGTGCCTCA CATTTCAACT TTGCGCACCC TGAAAGCCGT 550
 TATGTTTAGG TTAGTGTTTG CAACAGTTGA AGCGCATCAC TCAGGAGGCT 600
 ACTTGGTCTT GCTTTTGCGT CTTTGTTC AATTTTCACG TGATTTTGTT 650
 GGTGAACACG CGTACTTGAA ACTTATTATA AATTACATAA TTTTATAAGT 700
 TTCACTTCTT ATATAATACT CATATAATAT ATAGGGTTTA GAATGCCAAT 750
 TTTTAAAAAA AGAATAAAAA AATAAATAGA ATAAAATCGA AAAAATGAAA 800
 TGTAATAAAT TTGAGGGGGA CAAATAAAT ATGAAAGTCT ATTATTTAA 850
 TTTTCCATTA GAATTCTATT TTCCTTAGTT AATATGAGCT AGCCAGTTGG 900
 GAGATACACG AAAATGTCAT GAAACAGTTG CATGTAGGGA AATTAATGTA 950
 GTAGAGGGAT AGCAAGACAA AAATCCAAGC CAAGCTAGCT GCTCACGCGA 1000
 ACTCGATCCA CACGTCCTTT ACAGAGTTTC AAACGGATGA AATCTGCATG 1050
 GCATGCAACT AAAGCATTGT TCTCAGCTGC CAAGTACCCC TCACACTCAC 1100
 CAACCCTTTG TTTTCTCCC CATTGCATGT TAACTCAAGT TTATCCTTTC 1150
 TTTGCTTCTG GAAATTTTAC AAGCCTCAA CACGTCGACG TCCAATCTTG 1200
 TGACCAACAC GGCCAAAAGA AAAGAGAATC TCATCCCGTT CACACTTAGC 1250
 CACTTAAAGC TAGCCAAACG GTGATCTTTC TCTATATATT GTAGCTCTCT 1300
 AACACAACCA AACTACCAT TATTCAATAT TCAAACCTTG CTCTATACTA 1350
 CACACACTAG AAGAATA 1367

(22) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(ix) FEATURES

(D) OTHER INFORMATION: sequence of promoter of gene coding for β -conglycinine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

GTTTTCAAAT TTGAATTTTA ATGTGTGTTG TAAGTATAAA TTTAAAATAA 50
 AAATAAAAAC AATTATTATA TCAAAATGGC AAAACATTT AATACGTATT 100
 ATTTATTAAA AAAATATGTA ATAATATATT TATATTTTAA TATCTATTCT 150
 TATGTATTTT TTAAAAATCT ATTATATATT GATCAACTAA AATATTTTAA 200
 TATCTACACT TATTTTGCAT TTTTATCAAT TTTCTTGCGT TTTTGGCAT 250

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ATTTAATAAT GACTATTCTT TAATAATCAA TCATTATTCT TACATGGTAC 300
ATATTGTTGG AACCATATGA AGTGTTTCATT GCATTTGACT ATGTGGATAG 350
TGTTTTGATC CATGCCCTTC ATTTGCCGCT ATTAATTAAT TTGGTAACAG 400
ATTCGTTCTA ATCAGTTACT TAATCCTTCC TCATCATAAT TAATCTGGTA 450
GTTCGAATGC CATAATATTG ATTAGTTTTT TGGACCATAA GAAAAAGCCA 500
AGGAACAAAA GAAGACAAAA CACAATGAGA GTATCCTTTG CATAGCAATG 550
TCTAAGTTCA TAAAATTCAA AAAAAACGC AATCACACAC AGTGGACATC 600
ACTTATCCAC TAGCTGATCA GGATCGCCGC GTCAAGAAAA AAAAAGTGA 650
CCCCAAAAGC CATGCACAAC AACACGTACT CACAAAGGCG TCAATCGAGC 700
AGCCCAAAAC ATTCACCAAC TCAACCCATC ATGAGCCCAC ACATTTGTTG 750
TTTCTAACCC AACCTCAAAC TCGTATTCTC TTCCGCCACC TCATTTTTGT 800
TTATTTCAAC ACCCGTCAA CTGCATCCCA CCCC GTGGCC AAATGTTTCA 850
GCATGTTAAC AAGACCTATG ACTATAAATA TCTGCAATCT CGGCCCAAGT 900
TTTCATCATC AAGAACCAGT TCAATATCCT AGTACGCCGT ATTAAAGAAT 950
TTAAGATATA CT 962

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